

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently amended) A method for increasing plant yield relative to corresponding wild type plants, comprising introducing into a plant a nucleic acid encoding a D-type Cyclin Dependent Kinase (CDKD) resulting in a transgenic plant having increased plant yield relative to a corresponding wild type plant.
2. (Previously presented) The method according to claim 1, wherein said increased yield is increased seed yield.
3. (Previously presented) The method according to claim 1, wherein said increased yield is selected from the group consisting of (i) increased biomass of one or more parts of a plant; (ii) increased seed biomass; (iii) increased number of (filled) seeds; (iv) increased seed size; (v) increased seed volume; (vi) increased harvest index; and (vii) increased thousand kernel weight (TKW).
4. (Currently amended) The method according to claim 1, wherein said nucleic acid encodes a CDKD ~~or a functional variant thereof~~ which comprises an NXTALRE motif and a catalytic kinase domain and wherein said nucleic acid is obtained from a plant.
5. (Currently amended) The method according to claim 1, wherein said the nucleic acid ~~encoding a CDKD is represented by SEQ ID NO: 1 or is a functional variant thereof, and wherein the CDKD polypeptide is represented by SEQ ID NO: 2 or is a functional variant thereof, which functional variant is~~ comprises a nucleic acid sequence selected from the group consisting of:
 - (i) a nucleic acid sequence represented by the sequence of SEQ ID NO: 1;
 - (+)(ii) Portions a portion of [[a]] the nucleic acid sequence represented by the sequence of SEQ ID NO: 1 which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain;

- (ii) (iii) Sequences capable of hybridising a nucleic acid sequence which hybridizes under stringent conditions to [[a]] the complement of the full-length nucleic acid sequence represented by the sequence of SEQ ID NO: 1 and which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain;
- (iii) (iv) Alternative an alternative splice variant[[s]] of a nucleic acid sequence represented by the sequence of SEQ ID NO: 1 which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain; and
- (iv) (v) Allelic variants an allelic variant of a nucleic acid sequence represented by the sequence of SEQ ID NO: 1 which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain; or
- wherein the CDKD comprises an amino acid sequence represented by SEQ ID NO: 2 or a homologue, derivative, or active fragment thereof which comprises an NXTALRE motif and a catalytic kinase domain.
- and
- (v) ~~Homologues, derivatives and active fragments of an amino acid represented by the sequence of SEQ ID NO: 2.~~

6. (Previously presented) The method according to claim 1, wherein said nucleic acid sequence encoding a CDKD is overexpressed in a plant.
7. (Previously presented) The method according to claim 1, wherein expression of said nucleic acid encoding a CDKD is driven by a constitutive promoter.
8. (Currently amended) A method for the production of a transgenic plant having increased yield, which method comprises:
- (i) introducing into a plant or plant cell a CDKD-encoding nucleic acid or a functional variant thereof a nucleic acid which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain; and

- (ii) cultivating the plant cell under conditions promoting regeneration and mature plant growth resulting in a transgenic plant having increased plant yield relative to a corresponding wild type plant.
9. (Previously presented) The method according to claim 8, wherein said increased yield is increased seed yield.
10. (Withdrawn) A method for increasing plant yield, comprising introducing a genetic modification into a plant in the locus of a gene encoding a CDKD polypeptide or a functional variant thereof.
11. (Withdrawn) The method according to claim 10, wherein said genetic modification is effected by one of: site-directed mutagenesis, homologous recombination, tilling or T-DNA activation.
12. (Currently amended) A plant ~~obtainable by a method according to~~ obtained by the method of claim 1.
13. (Currently amended) A construct comprising:
- (i) a CDKD-encoding nucleic acid or ~~a functional variant thereof~~ a nucleic acid which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain;
 - (ii) one or more control sequence capable of driving expression of the nucleic acid sequence of (i) which comprises at least a GOS2 promoter; and optionally
 - (iii) a transcription termination sequence.
14. (Cancelled).
15. (Previously presented) A plant transformed with the construct according to claim 13.

16. (Currently amended) A transgenic plant having increased yield relative to a corresponding wild type plant, wherein said plant comprises an isolated nucleic acid encoding a CDKD or ~~a functional variant thereof~~ a nucleic acid which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain.
17. (Previously presented) The transgenic plant according to claim 16, wherein said plant is a monocotyledonous plant.
18. (Previously presented) Harvestable parts of a plant according to claim 12.
19. (Cancelled).
20. (Previously presented) The method according to claim 2, wherein said seed yield includes one or more of the following: increased number of filled seeds, increased seed weight, increased harvest index and increased TKW.
21. (Currently amended) The method according to claim 1, wherein said CDKD is encoded by a nucleic acid comprising a nucleic acid sequence as represented by SEQ ID NO: 1 or a ~~functional variant thereof~~ a nucleic acid which encodes a CDKD comprising an NXTALRE motif and a catalytic kinase domain, or wherein said CDKD ~~is~~ comprises an amino acid sequence as represented by SEQ ID NO: 2 or ~~a functional variant thereof~~ an amino acid sequence comprising an NXTALRE motif and a catalytic kinase domain.
22. (Previously presented) The method of claim 10, wherein said increased yield is increased seed yield.
23. (Previously presented) The transgenic plant according to claim 15, wherein said plant is selected from the group consisting of sugar cane, rice, maize, wheat, barley, millet, rye, sorghum or oats.

24. (Previously presented) The transgenic plant according to claim 17, wherein said monocotyledonous plant is a cereal.